Archaeology at Kirkdale

by Lorna Watts,
Jane Grenville
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Introduction

Kirkdale is well-known and much visited. Its fame derives from a cave found during quarrying at the beginning of the last century, which yielded bones of extinct animals; and from St. Gregory's Minster. The famous Anglo-Saxon inscription, on a sundial inside the porch, is dated AD 1055-65; it records the restoration of St. Gregory's from a fallen and broken state by Orm Gamalson, the then Lord of Kirkbymoorside (cf. Taylor and Taylor 1965, 359). The existence of earlier phases is attested by several pieces of sculpture, one dating from perhaps as early as the late 8th century (Lang 1991, 162). There are a handful of churches in Ryedale with sculpture of this period. One, at least, was founded as a result of the mission from Northumbria described by Bede: Lastingham is mentioned by name as the foundation of Cedd in the middle of the 7th century, and as the intended burial place of King Aethelwald (Bede 1955, 176-8); another (Stonegrave) is documented as a 'monastery' in the mid-8th century (Whitelock 1955, 764).

Some of the churches in Ryedale where Anglo-Saxon sculpture has been found also exhibit Anglo-Saxon structural remains; St. Gregory's Minster at Kirkdale and Hovingham are the best-known of these. Even where no part of these churches can be shown to be Anglo-Saxon, it is likely that excavation would reveal earlier phases than those visible in the present building; and it is possible that some will be shown to be as early as the time of Bede, of the later 7th - early 8th century.

This was the hope behind our research on Kirkdale. Although we had long known the church, the catalyst for work there in 1994 was anxiety that the tower, built in 1827, was pulling away from the church: cracks had developed and there is a lean of several degrees in the tower towards the west. There were archaeological implications in any work proposed to remedy the structural weakness; in the end, however, it was decided not to attempt any drastic measures, such as underpinning, but to monitor the cracks by glass tell-tales. Our involvement in these discussions led us to examine the church

more carefully then we had before. New features were observed, and we realised the site had great potential for structural analysis and excavation.

Another great asset is the preservation in Kirkdale Vicarage of a very full archive extending back nearly two centuries, which the present incumbent, the Reverend John Warden, has made freely available to us; other documents are located principally at the Borthwick Institute in York, Northallerton County Record Office and the Bodleian Library in Oxford.

Unlike some other early churches in Ryedale, St. Gregory's Minster, with its churchyard, is in open ground, with pasture fields to north and south; this offered the hope of both preservation of evidence of earlier activity and opportunities for excavation of areas adjacent to the church not disturbed by graves. Our research gradually crystallised into an assessment of the extent and character of the possible Anglo-Saxon monastery of which the church is the one surviving element. This led to an examination not only of the church and archive, but of the whole area which might comprise the estate which supported the monastic economy. The work has involved surface field survey, geophysical prospecting, excavation and historical research; also the recording of those parts of the fabric of St. Gregory's Minster believed to be Anglo-Saxon, by stone-by-stone drawing and by photography. We are not the first to investigate the history and archaeology of Kirkdale, nor shall we be the last, but we hope (though with limited resources), to make a contribution in this generation to a wider understanding of one of the best-known places in Ryedale. This is a preliminary report on our progress in the first year of work.

Historical Research

The written and pictorial sources for the history of Kirkdale are numerous and diverse. For the fabric of the church there are a few details from the 16th century onwards, when for example an **Archbishop's Visitation** noted decay in the chancel

(Borthwick Institute). The bulk of sources, however, date from the 19th and 20th centuries, again in the context of the need for repairs. There is **correspondence** between various vicars of Kirkdale and the patrons of the church at Oxford which also outline what was undertaken during the restorations of 1827 and 1881 (Kirkdale Vicarage Archive and Bodleian Library, Oxford). The financial outlay such work involved is indirectly reflected in the **Churchwardens' Accounts**, which record high expenses for 1828 (Kirkdale Vicarage Archive). All applications for alterations and repairs have been formalised in this century by the procedures for **Faculties** (Borthwick Institute and Kirkdale Vicarage Archive).

Pictorial and later photographic sources, which comprise mainly external views of the church, date from the late 18th century onwards (see below).

For recent times, there are also many secondary sources dealing with aspects of the standing structure. Kirkdale features in the works of such **architectural historians** as Rickman in the early 19th century (e.g. Rickman 1825), and Taylor and Taylor (1965) in the latter 20th century; to these should be added the detailed study of Tudor (1876), who wrote both as a practising architect and also as son of the then vicar.

Although Eastmead's **local history** of 1824 describes Kirkdale, he dismissed it with the remark that `The fabric itself has nothing particularly interesting in it'. There are entries for Kirkdale in **local topographical guides** such as that of Frank (1888) and the popular little red guides of Murray at the beginning of this century, which went through various editions (Morris 1920). Successive vicars and others from the Rev. Powell onwards have also produced valuable **church guides** (Powell 1909; Penn 1957; Fletcher 1990). The sculpture and sundial have recently been fully described and illustrated, and put into a wider Yorkshire and national perspective (Lang 1991, Kirkdale, 158-66).

For the wider area around Kirkdale, the 12th century boundaries of Rievaulx provide topographical information about the immediate setting of the church, which formed an 'island' amidst abbey land (see McDonnell ed. 1963, map p. 111). The Registers of Births, Marriages and Deaths for the church show that several families were living in the area in the 16th and 17th centuries (transcripts in Kirkdale Vicarage Archive). From the 19th century, there are large-scale maps. That for the 1806 Enclosure Award has been lost, but the map of 1848 to accompany the Survey of Tithes survives, although lacking

names for the fields adjacent to the church (Northallerton Record Office). Other 19th century maps show that Kirkdale was close to the turnpike road from Helmsley to Kirkbymoorside.

Topographical Survey *The Dale*

Kirkdale is essentially the flood plain of the Hodge Beck (medieval *Redofram* and variants), with a long history of downcutting, braiding and terracing (fig 1). At the north end of Field C, the river (now dry in summer) turns sharply from a north-south curve under the cliff-slope on the west side of the valley, to an easterly course. It then resumes a north-south course down the east side of the valley, past the east side of the church and churchyard (fig 2).

The sharp bend is caused by a low subsidiary cliff at the NW side of Field C which has deflected the river to the east. This subcliff can be traced as a terrace along the west side of Field C, through the churchyard (A), and, more positively, through Field B.

The basic geological stratum is the Corallian limestone, well displayed in the bed of the beck and in its margins and cliffs. Excavation (Trench I, below) showed that there are complex former river-bed deposits on this rock, giving rise to a stratification up to 1.5m deep. This consists of limestone gravels, river boulders of diverse origin, sands and clays.

The flood-plain must always have been an attractive focus for settlement, pasture and arable. The church and churchyard are sited where this is wide, before narrowing shortly afterwards to pass through a steep valley with a high cliff on its west side, to emerge into the Vale of Pickering further south. In assessing the rich economic resources for a monastery (contra Lang 1991, 16) one must take account not only of the potential of the flood-plain, but of the wooded slopes of the valley, and the `tops' above them; the latter are dense in evidence of prehistoric and Roman settlement.

Field C (fig 3) retains prominent earthworks of ridge and furrow; excavation (Trench II, below) suggests that this field was in arable use in the 12th century and possibly later. The field system is valuable in archaeological terms, not only for its own sake, but because it seals earlier levels associated with any putative monastic complex.

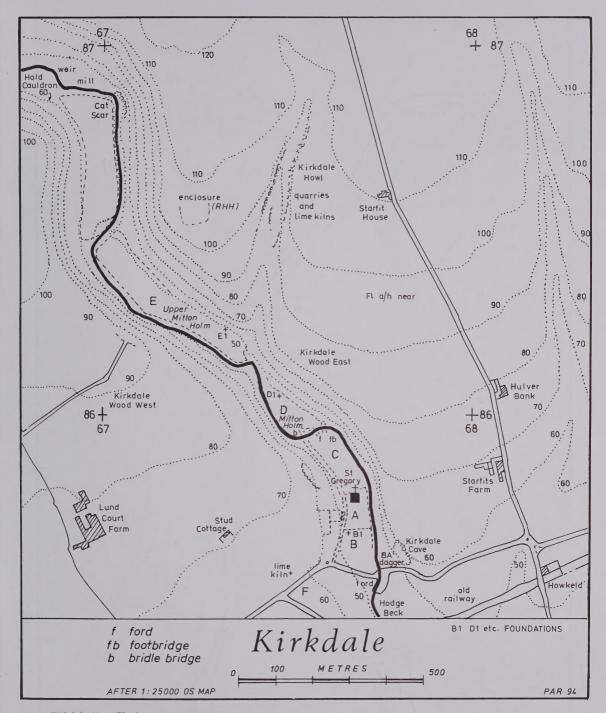


Fig 1 - Kirkdale (Area Plan)

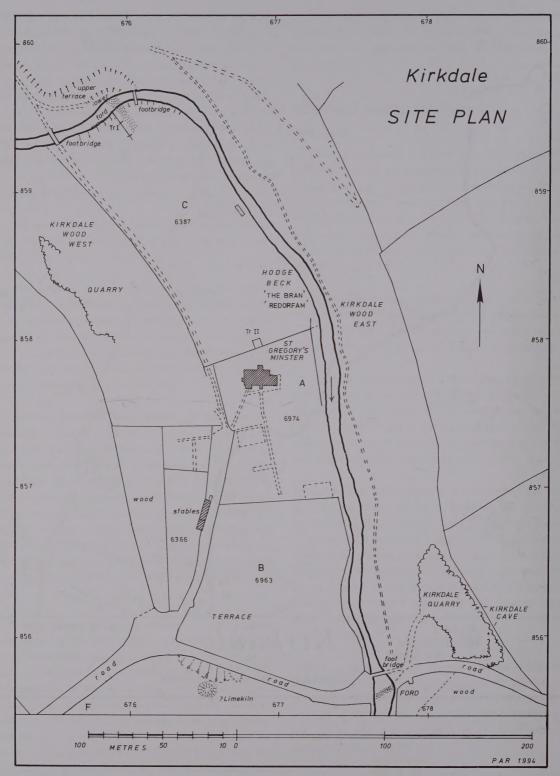


Fig 2 - Site Plan

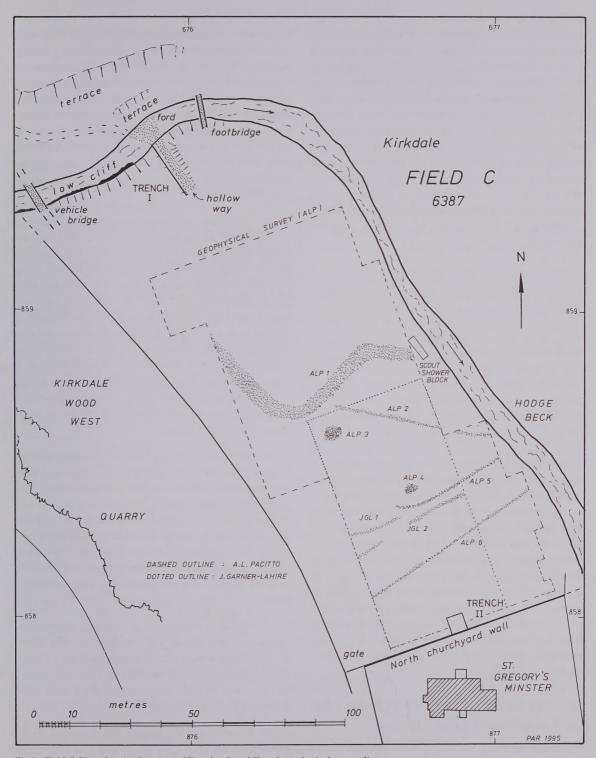


Fig 3 - Field C, Plan showing location of Trenches I and II and geophysical anomalies

Apart from the ridge and furrow, with its attendant headlands at the north and south ends of Field C, there is a more recent track leading to a bridge across the beck at the NW corner of the field. This is capable of carrying vehicles and horses, and continues through Field D; it is said locally to have been made for the transport of lime, produced in numerous kilns in the dale. There is also a footbridge at the NE corner of the field; and a substantial ford in the central area, approached by a hollow way. The latter, in its present form, is apparently more recent than the ridge and furrow, and likely to be of postmedieval date. Both Fields C and D (fig 1) were granted by Major J.H.R. Shaw, in perpetuity, to the Scouts as a camping site; the permanent monument to this activity is their tall flag-pole east of the ford. The west side of the ford was the scene of our first excavation in Kirkdale, in 1994-5 (Trench I, below).

There may also have been caves in this area (always to be looked for in a monastic setting) suitable for eremitical retreat. The well-known bone cave near the church does not appear to have been visible in historic times, but there may be others. Further up the valley to the north, beyond Hold Cauldron Mill (which itself may have early origins), three caves are mentioned in the Parker MS (see *The Ryedale Historian* 10 (1980), 25). In these lived, in 1699-1711, an 'Ethiopian' lady named Naggs who had 'four hands'; she was the mistress of Sir Charles Duncombe, who died in 1711. The probable site of these has been located (not on fig 1), but the caves have been filled in.

Although nobody has lived in the dale in recent times, it was formerly home for a few families (above). Earthworks and wall foundations can be seen in fields E, D and C (fig 1). Building E1 may be the 'hospital' (in the 'Widows Closes') referred to in the Parker MS (see *The Ryedale Historian* 10 (1980), 24) and Building D1 may also be a former dwelling. The latter was, however, believed by Mr Edward Wood's grandfather (of Starfits Farm, and the tenant of the two fields to the north of the church) to be the original Chapel of Kirkdale'. A further substantial building (B1) is indicated by a large earthwork on either side of the churchyard's south boundary and bisected by it; and there are probably others in the southern part of Field B. A circular earthwork on the hill NW of Field F (fig 2) is a former lime-kiln (inf. Major J.H.R. Shaw).

The environs of the church and its burial ground (fig 2)

Although the church is now apparently isolated, the by-road which now runs close to the short lane leading to the church was formerly the main turnpike road from Helmsley to Kirkbymoorside (see above); it was raised slightly above the level of the vale, the present main road being a `by-pass'. Close to the bone cave, south of the church, the old road crosses the Hodge Beck by a ford, which is sometimes impassable in winter. The narrowness of the dale here would always have given rise to deep and swift water; it thus seems a most unsuitable place for a ford. It is possible that there was anciently a bridge here, but for this there is no evidence. This may be at least one of the reasons for the location of the settlement and present ford at Kirkdale. Apart from the church and burial grounds (A), there are outbuildings along the lane, and traces of other buildings in Field B described above.

The churchyard has several well-defined burial areas of different dates. There has been a tendency at St. Gregory's in this century for new areas to be developed, rather than continuing intensive burial in the original areas; this is because of the availability of open land south and west of the church. The oldest part is around the church itself. The churchyard memorials number over 500; it is likely that the total number of burials is over ten times this number (see Trench TO, below). There has thus been considerable destruction of ancient deposits in the churchyard area. Even around the church itself, the documentary evidence indicates disturbance of both the foundations and adjacent stratification by successive restorations of the church. Nevertheless, important structural evidence does survive, as was shown in Trench ST (below).

Few discoveries have been made in grave-digging. It has generally been observed that digging in the western area, in the area of the sub-cliff and above, reaches 'rock' at a metre or so, and has in recent times (including 1995) involved the use of a compressor to achieve adequate depth. In the eastern flatter areas, the subsoil encountered was 'sand'; in Trench TO this was seen to be a plastic sandy clay; this is probably of alluvial or colluvial origin (or even the sediments of 'Lake Pickering'), the ancient stream-beds and rock being deeper than the depth of graves.

The only discoveries made in grave-digging are two stone objects now preserved inside the church; the so-called 'quern', which we suggest is actually the emplacement for a wooden cross and the battered medieval sculpture of the Virgin, now in the north aisle (Fletcher 1990); there is also a stone coffin discussed in the Parker MS (*The Ryedale Historian* 10 (1980), 19).

On the north side, not far from the church (fig 3), the boundary is a substantial stone wall, running west-east from the western slopes of the dale to the beck. This separates the churchyard from the ridge and furrow field system in Field C.

The wall, or earlier versions of it, are shown in pictorial illustrations as early as 1821 (fig 6). We considered that the wall is both too close to and too awkwardly aligned to the church to be the original boundary of the churchyard or of the suggested monastic complex; we thought it might date from the same period as the ridge and furrow, representing simultaneously the creation of an arable field and also the contraction of the churchyard. These hypotheses were tested by the excavation of Trench II, with encouraging results (below).

The Church

St. Gregory's Minster

The name is shown by the sundial inscription to be at least as early as the decade before the Conquest; this has considerable historical implications, not only in the use of the word 'minster', a topic of current debate by historians, but in the dedication to St. Gregory, which might hint at an early commemoration of the Pope who figures so largely in Bede's narrative.

Indeed, the inscription is by far the earliest reference to the church; the Minster does not figure in Domesday Book, Kirkdale being, it is believed, subsumed under Kirkbymoorside.

The description of the restoration by Orm Gamalson is also of historical and archaeological significance, especially in its confirmation of the existence of an earlier church, suggested archaeologically by the presence of numerous pieces of sculpture of tenth century and earlier date (Lang 1991, 158-166). We may also conjecture whether Orm was motivated by pious or political motives to restore the old church. The inscription also emphasizes the political importance of Anglo-Scandinavian lordship in the area, which may have begun in a pagan and possibly military milieu in the later 9th century (pers. comm. Julian Richards).

The Church from 1778-1995

The church as surviving today (fig 4) consists of a nave, chancel, north aisle, tower and south porch.

The pictorial representations of 1779, 1821, 1824 and 1830 (figs 5-8) show how the church has changed in its rooflines to that of the present day (fig 11). The 1830 illustration (fig 8) shows the tower built in 1827, now housing two bells, one cracked; either or both of these may have been in the bellcote shown in the earlier illustrations.

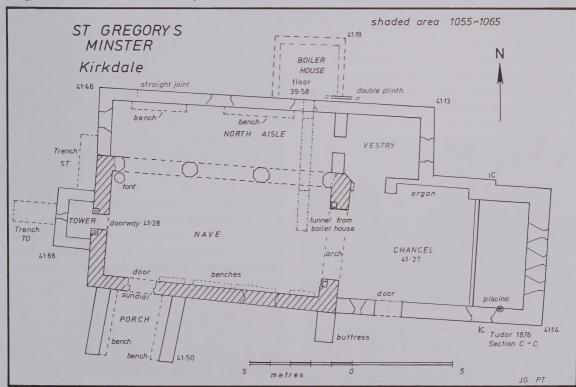


Fig 4 - St. Gregory's Minster; Plan showing location of Trenches TO and ST, and other features.

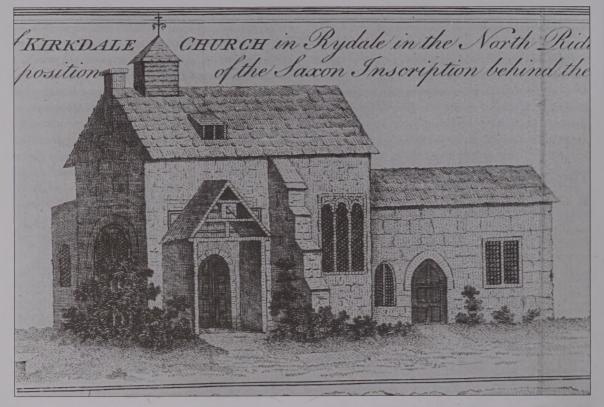


Fig 5 - The Church as depicted by Brooke (1779)

It has been assumed by all students of the church that some parts now visible are of Orm's rebuilding (e.g. Taylor and Taylor 1965, 357-61); notably the western doorway and the lower parts of the adjacent west nave wall, with its massive side-alternate quoins. Less certainty has been accorded to the piers of the chancel-arch with their capitals, bases, attached columns and imposts; though we regard these as of this period, and probably *in situ*.

It is sometimes assumed that the south wall, with its two embedded Anglo-Saxon crosses, is also the original work of Orm, together with the sundial recording his restoration, now in the projecting south porch. The documentation of 1827 makes it clear, however, that the greater part, if not the whole, of the south wall was rebuilt at that time; but we cannot yet define clearly the limits of this rebuild (see below).

It seems too, that the sundial stone (which is not level) may not be *in situ* (Rickman 1825, 351); it may, however, be approximately in its original position over a south doorway, the obvious place for it to have been set up. Tudor refers to it as being carved on the back, suggesting it had been out in the last

century (Tudor 1876, 10, quoting Haigh); Professor Lang suggests (pers. comm.) that it is the right size to have been re-used as a medieval grave-cover, which would account for any secondary carving. It was rediscovered in 1771 by the Reverend William Dale, as described in Brooke's famous paper in *Archaeologia* (Brooke 1779).

The north arcade is dated by its architectural detail to the late 12th or 13th century, and it has usually been assumed that the present north aisle was built at the same time, to increase the size of the church (e.g. Pevsner 1973, 217).

The pictorial representations

The earliest picture of the church is that of Brooke (1779) (fig 5); this was drawn by him to show the context of the sundial stone block. The porch did not at that time enclose the whole of the sundial stone; its corners are shown protruding sideways from the roof; and there seems to be a further 'frame' above and to the left of it. A central south buttress is shown. The fact that no scar of this can be seen today seems to confirm that this wall was rebuilt in 1827; the window now above the east roof of the



Fig 6 - The Church and churchyard in 1821 (Tudor 1876).

porch is absent in Brooke's drawing. The three-light window east of the buttress is not in its right position; and it is clear that Brooke's depiction is not wholly reliable.



Fig 7 - The Church in 1824 (Eastmead 1824).

The next depiction (fig 6) is a copy made of a painting of 1821, which was published by Tudor (1876). This is a valuable depiction of the churchyard with its wall; and a building whose exact location here is ambiguous; it could be a mortuary house. The church is similar to that shown in 1779, but with the three-light window in the right position, and the west door apparently blocked. But there is now an enlarged porch, apparently that which exists today, with the exterior (metal) sundial possibly transferred from the Brooke version of the porch; and the window above the east side of the porch. The 1824 drawing (fig 7) is similar, but from a SE aspect (Eastmead 1824, between 150-1).

By 1830 (fig 8) the tower has been built and the buttress has been moved to the nave/chancel junction: all apparently in 1827. We would suggest that although the south wall was said to have been wholly rebuilt at this time, this does not seem to have included the porch. There is a line of stones linking the east side of the porch to the south wall, visible now at the junction of the porch and nave; some are common to both structures, the new nave wall being apparently keyed in to the surviving porch. It would seem that this was left standing, presumably propped up. The implication is that the south wall was rebuilt *from the north*.



Fig 8 - The church in 1830, photograph by Raymond Hayes of an original drawing (print 3224 copyright Ryedale Folk Museum).

Our next major source for the church is the impressive and rare monograph of the architect Charles Tudor (1876). This includes a descriptive text, plans, sections, elevations and detail:

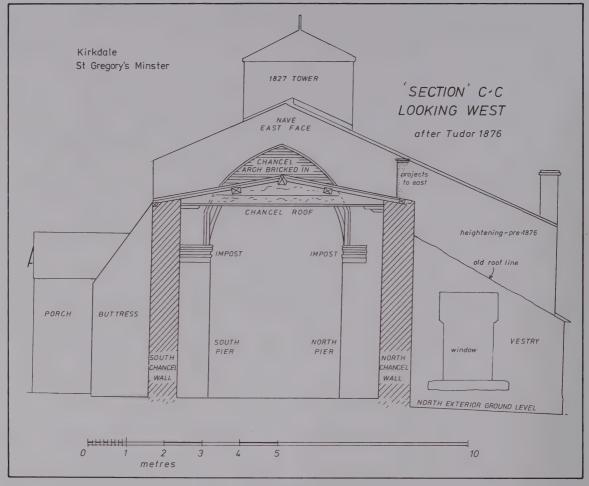


Fig 9 - The blocked chancel arch in the 19th century (Tudor 1876, section C-C)

an invaluable record of St. Gregory's as it was in the early 1870s. At first sight the elevation drawings appear to be stone-by-stone, but closer recent re-examination shows that the detail is not always accurate, but semi-diagrammatic; and there may be other minor errors too.

Since 1876 major changes have been made to the north aisle and to the roof. Tudor's and earlier illustrations show a nave roof higher than that of the chancel, and with a steeper pitch. While the height of the nave roof may not have changed much since the 11th century, the chancel had clearly at one time been much higher, to accommodate the upper part of the present chancel arch. This is assumed to be medieval (though rebuilt in the 19th century, Tudor 1876, 10). It was effectively truncated by the lowering of the roof (possibly in 1633, the date on a piece of the former roof now displayed in the chancel); the upper part is

shown bricked in on Tudor's drawings (fig 9). Tudor (1876, 10) says that during the rebuilding of the medieval arch before his time, the springers of an earlier arch were uncovered; this would seem to confirm that the present piers are original (11th century) work. The pre-Conquest arch cannot have been much lower; it is presumed to have been round-headed (fig 10).

In 1881 the relative heights of nave and chancel were reversed; the nave roof was lowered slightly, and that of the chancel considerably raised (fig 11), restoring the chancel arch to its full visibility. Later works include the construction of a boiler-house in the early 1920s, operational until about 1959 (inf. Edward Wood); and the widening of the east part of the north wall to accommodate the organ-case (Terrier of 1941, Kirkdale Vicarage Archive).

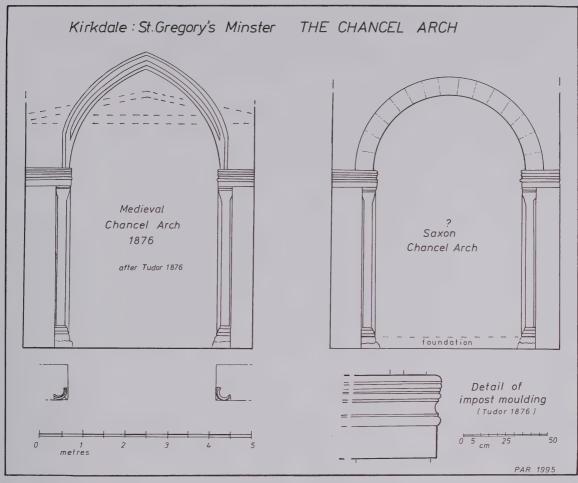


Fig 10 - The medieval and (postulated) Anglo-Saxon chancel arches.

In these works, pieces of Anglo-Saxon sculpture were discovered embedded in walls; and (probably in 1909), the two grave-covers of late 8th-early 9th century date (Lang 1991, 161-2, Kirkdale nos. 7-8) were moved into the church, where they now rest on box tomb-like structures beneath the arcade. Their original location, at the base of the exterior of the 11th century west wall, is shown in Tudor (1876, fig 3).

New observations on the church

Some new features and observations have been added during 1993-95. These may now be listed, beginning with the exterior and continuing inside.

 In excavating in the 1920s for the steps leading down into the boiler-house, on the north exterior of the north aisle, the builders uncovered a double plinth (fig 12). This is c 60 cm below present ground level, and is, we believe, likely to be Anglo-Saxon. Taylor (1978, 966) lists 14 examples of such double plinths in Anglo-Saxon contexts, but oddly he did not notice the Kirkdale example. The part of the wall which incorporates the double plinth extends a little way to the



Fig 11 - The church today, from the south, winter 1994-95

east, and several metres to the west; its upper limit is we believe marked by a rough offset above ground level, ending westwards in a rebuilt area (fig 12). The upper parts of this wall are, of course, of medieval and modern date.

In view of its depth, we suggest this may be evidence for a building earlier than that of 1055-65. It implies a lower ground level than now, this having risen by the effect of burial and other factors. We have found no reason to believe that the ground level associated with Orm Gamalson's church was any different from that of today.

2. At the west end, the west exterior wall of the nave is visible on either side of the tower, with its massive quoins. The lower part of this is likely to be part of the 11th century church; but the upper part looks different in the colour and pattern of its stones and quoins. There might just be two phases of the west wall here. which could have been the main entry. We are not convinced that the present south doorway, at least in its exterior members, is not in fact late Anglo-Saxon rather than 12th century, as often believed (e.g. Taylor and Taylor 1965, 359).

- 5. Just inside the doorway, to the east, are two stones at floor level on the inside of the south wall, but canting down to the south. They could be merely the footing for this, displaced by the weight of the wall above; or may be part of an earlier wall. The easterly stone exhibits very worn traces of what appears to be interlace decoration.
- 6. The piers on either side of the chancel arch (fig 10) we accept as late Anglo-Saxon; they are however of different widths and have large mortar infills between their component elements which may hint that they have been adapted from an earlier structure, and perhaps `fitted on' to

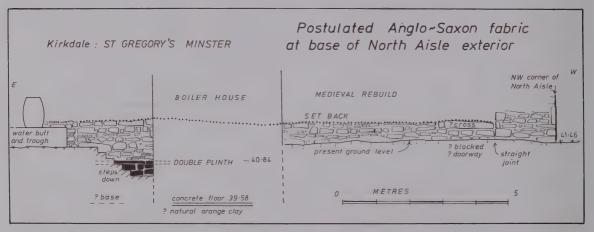


Fig 12 - The double plinth on the north aisle wall and its context.

- 3. Inside the tower, one can view the central part of this west exterior. It is much disturbed and plastered, but a single course of pitched stones is visible in the upper part, not noted by Taylor and Taylor (1965); this continues southwards beyond the 1827 tower.
- 4. We find it difficult to believe the tall narrow west doorway was the main entry into the church; we suggest that it may instead have led into a western tower, porch or some other chamber; for this there is however as yet no evidence (but see Trench ST below). If we believe that the sundial stone was originally in the same position as it is now, over a south door (but obviously without a porch), it would follow that there was a south door into the church in the 11th century

an earlier plan. The attached columns and bases are in poor condition, but similar; both bases have a keeled and reeded profile, similar to the capitals of the great chancel arch at Deerhurst St. Mary (Rahtz and Watts in press); the northern one is in better condition. The capitals are rough and simple, but are not identical in height or form, which again may hint they were not carved and set up *de novo* in the 11th century. The arch itself (fig 10) would have been *c* 5.7m high and 3.45m wide; in the second order of size of Taylor's ranking (1978, fig 654), and only slightly smaller than the chancel-arch of Deerhurst St. Mary (6.1m high and 3.7m wide).

The crowning mouldings above the capitals (inset on fig 10) are of great interest. They are unlikely to have been added at

the time the medieval chancel-arch was built. We see no reason to believe that they are not contemporary with the piers below - part of the setting for the great Anglo-Saxon arch. Taylor (1978, 1052) lists eleven such moulded imposts, including Kirkdale.

We have not climbed up to examine these mouldings closely, but they look like stucco. Most parts appear to be rather mechanically-cut or moulded, and these we believe to be portions restored at an unknown date (?1909). Three parts do, however, look original, being more 'hand-made' or rough looking. The first is on the south pier, the part (c 20 cm) nearest the south wall on the west side; a faint line where this joins the restored part can be seen with a spotlight torch. The second is the southernmost part on the east side of the same pier (also c 20 cm). Since these two sections abut the south wall of both the present nave and chancel, in the same east-west plane, they suggest that the south wall of the Anglo-Saxon nave and chancel were similarly aligned; if the chancel was symmetrical, then it was as wide as the nave (as at Deerhurst) and perhaps as long; i.e. very similar to the present chancel; the latter may thus be on Anglo-Saxon foundations.

The third 'original' section is that on the east side of the north pier, from its SE corner to a point c 65 cms further north, where it ended, or has been broken away, for reasons we cannot yet understand (fig 9).

All these observations on the division between nave and chancel suggest to us that what we may assume for the moment to be the east end of Orm Gamalson's nave was not built *de novo* or on a symmetrical plan; but was built onto something else and adapted to it. In other words, the earlier church was 'broken and fallen' and yet was sufficiently useful still to be absorbed into the new church, albeit with some difficulty. Elucidation of this is clearly a major target for understanding the Anglo-Saxon history of the church.

Our account thus far has been limited to what is available to everyone, whether from studying written sources, or the landscape, or the church fabric itself. We may now turn to excavations which cannot be left open, because the buried remains would deteriorate rapidly; and, firstly, to the results of the geophysical survey.

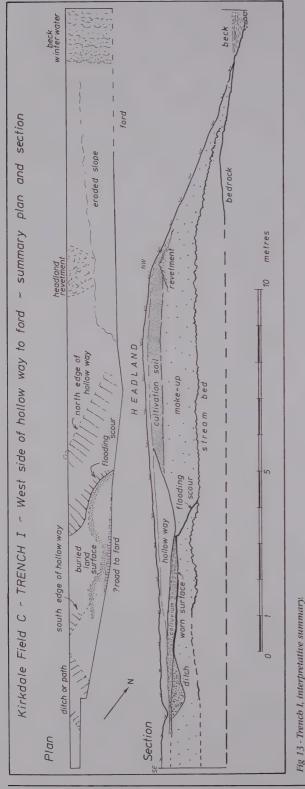
Geophysical Survey

During 1995, geophysical surveys were made in Field C (fig 3). An initial gradiometer (magnetic intensity) survey covered an area of 80 x 40 m northwards from Trench II; this was done by Justin Garner-Lahire of Field Archaeology Specialists Ltd. (associated with the University of York). Several aligned linear features extending from west to east were noted in an area c 40 m north of the churchyard wall. The most prominent of these are sketched in on fig 3 (JGL 1 and 2). Garner-Lahire observed that these linear features appeared to bound an area of generally higher magnetic readings to the south, extending up to the churchyard wall.

The most substantial survey was carried out by A.L. (Tony) Pacitto of Hovingham, using a gradiometer of a type and with a method different to that of Garner-Lahire. He was able to cover the greater part of Field C, and defined, inter alia, six features (ALP 1-6, fig 3). He discerned linear anomalies in the southern part of the field (ALP 5 and 6), and another diagonal one further north (ALP 2). In this area also were two discrete anomalies (ALP 3 and 4); these look as though they might be sub-rectangular in plan; Pacitto considers that they might be burnt structures, kilns, or furnaces. The most important feature, however, lies further north (ALP 1), a sinuous feature extending from the western hillslope to the Hodge Beck. This Pacitto suggests to be a wide ditch, i.e. a dug feature, not deep enough to be an ancient stream-bed. It was observed that the land on the southern edge of this is slightly raised above that to its north. It is suggested that this might reflect an earlier landscape feature, perhaps a scarp along the southern side of an area prone to occasional very high flooding; the postulated ditch, with perhaps an associated bank, acting both as a northern boundary and as a flood-barrier. The area to its south exhibits more minor features than that to its north. A major problem with the more precise definition of both areas is the very large amount of ferrous debris, probably deriving from both arable cultivation and scout activity.

Both surveys need further analysis and, in particular, a comparison needs to be made between the plan of magnetic anomalies and that of the ridge-and-furrow earthworks, expressed both in hachures and as close contours.

It is clear however that Field C has a high potential for further research, both geophysical and by excavation, and may indeed retain a major part of the postulated Anglo-Saxon monastery, sealed beneath the ridges of the medieval cultivation system. (See Trench II below).



Excavations

These have been necessarily on a very small scale, to deal with specific problems. The results are not given in detail here but will be published elsewhere.

Trench I (fig 13)

This was at the north end of Field C (fig. 3) on the west side of the present ford. The bank was being eroded by tractors, cattle and horses, and a deep stratification was visible. The side of the hollow way leading to the ford was cleared back to provide a section from south to north, and allowed a small area of excavation. The results are summarised in fig 13.

The lowest layer is the bedrock, visible in the streambed; on this were sands and gravels of an ancient streambed; soil, sand and gravel had accumulated on this (on the left-hand side of fig 13) and the surface of this became consolidated, a worn surface with a possible rut right on the modern track edge. In this surface were two? Roman sherds, a nail or stud-head, and a small piece of tile. This is seen as the approach road to a ford in Roman or Saxon times.

This was then cut by a NW-SE ditch of unknown date, and both were then sealed by a layer of clayey alluvium or colluvium, probably the latter, washed-in from the valley slopes.

All this was then cut by a massive flood-scour, the result of a flood of unknown, but pre-medieval date. The level of the flood postulated is similar to that reached in a flood in about 1975 (inf. Edward Wood).

The scar was then filled up with sand, gravel and soil (make-up' in fig 13). There was an ox-tooth in this and a sherd of gritty ware which we cannot parallel at present, but it could be Anglo-Saxon. Above this was the cultivation soil of the northern headland of the ridge-furrow system, in which were sherds of medieval date. This was limited at its north edge by a stony revetment bank. Finally, all this was cut away by the present hollow way leading to the ford, and another SW-NE hollow way joining it in the area.

The excavation was useful in showing the depth and complex nature of the stratification likely to be encountered in excavation of the flood plain; and in demonstrating a remarkable coincidence between an ancient and modern ford, separated by centuries of agricultural use.

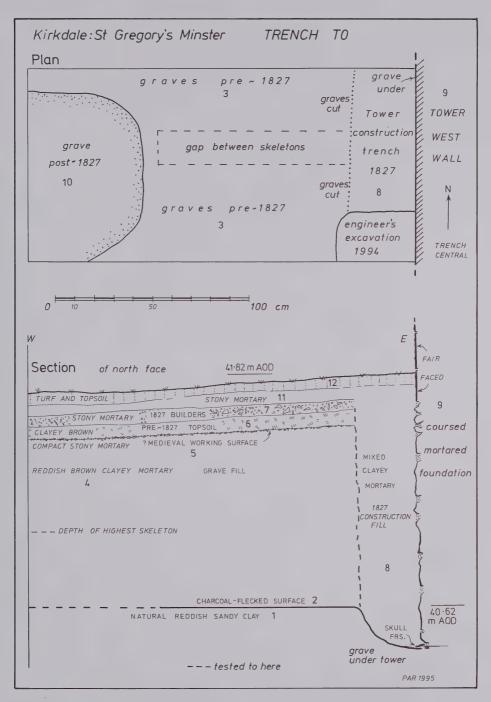


Fig 14 - Trench TO, plan and section.

Trench II (location on fig 3)

This is in progress (1996). It is a 5m square, sited close to the churchyard wall at the south end of Field C. Its purpose is to date the wall and determine if there were earlier boundaries on this line. The wall appears to be a post-medieval rebuild, but there are the collapsed remains of two medieval walls on its north side, integrated with the soil of the medieval headland to the north. There were numerous sherds in the latter, mostly if not all of 12th century date. The cultivation soil is deep (c 70 cm.), and below it an earlier ground surface has been defined; in this, grave cuts are visible, and there are some loose human bones and evidence of non-ferrous metal-working. This cutting appears to have confirmed our hypothesis most positively: that the cemetery at least extended into Field C beyond the present churchyard wall.

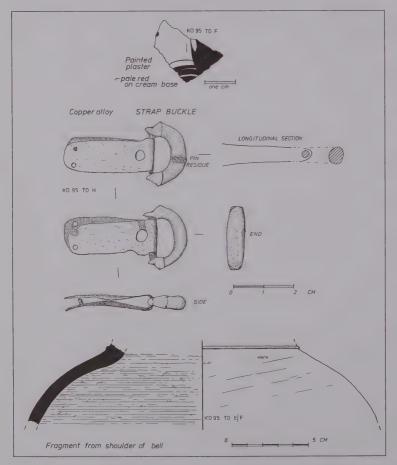


Fig 15 - Trench TO: bell fragment, painted plaster, and Anglo-Saxon strap buckle.

Trench TO (fig 14)

This was a small cutting on the west side of the tower, to determine why it is pulling away from the church. It was found that the footings were only just over a metre deep, bedded into a plastic sandy clay; so it is hardly surprising that the tower has moved since its construction in 1827. Eight or more graves were defined in the trench, but none of the interments was disturbed by us; at least three were cut by the tower construction trench. Medieval and 1827 builders' levels were encountered.

In the construction trench was part of a bell; in soil above the medieval builders layer was a late Anglo-Saxon strap buckle, and some cream plaster, one piece of which is painted pale red (fig 15).

Trench ST (fig 16)

Close to the NW corner of the 11th century nave was a very large block of sandstone (fig 16), mostly buried in turf and topsoil. The upper side is very smooth, heavily worn, probably by having been walked on for a long period, though not in this location.

Incised into this surface are very vestigial traces of decoration (fig 17) which can be matched by elements of that on a sculptured stone in the church, a cross of 10th century date (Lang 1991, Kirkdale No. 5). It seems likely that our stone was a 10th century grave-cover, perhaps the cover of a stone coffin. The stone was not, however, quarried or cut for this purpose, as it has earlier weathering i.e. it was available for re-use in late Anglo-Saxon times. One possibility is that it was originally a prehistoric standing stone - a menhir like the great stone still standing in Rudston churchyard; or even one of a circle.

Removal of this stone for subsequent public display exposed the footings of the 11th century west exterior. Below this was what appears to be an earlier structure, surviving as two courses of yellow sandstone (fig 18).

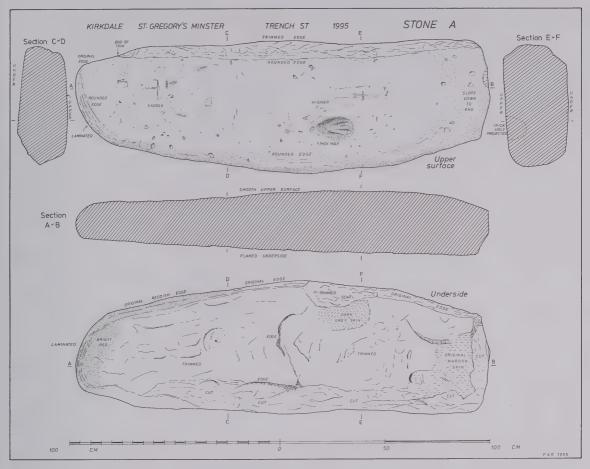


Fig 16 - Stone A, plan and sections.

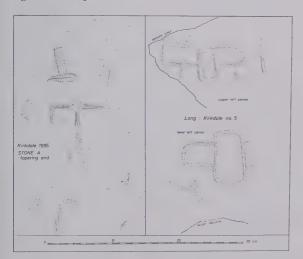


Fig 17 - Decorative elements on tapering end of Stone A, compared with selected parts of Lang 1991, Kirkdale No. 5.

The outer, vertical face of one of the southern stones has residues of stucco, integrated with a floor extending to the west; the latter is itself on a massive foundation. Only a very small area of this structure could be exposed, but it is clearly a major addition to the plan of the church, a westward extension. It could be part of a tower, campanile or most plausibly a baptistery; apparently earlier than the church of Orm Gamalson.

Conclusion

This preliminary account has demonstrated the considerable potential of the area around St. Gregory's Minster, and of the church itself, in elucidating the origins and history of what we believe to be an earlier Saxon monastery and its estate. The advance in knowledge is gratifying, and much exceeds our own expectations in the deployment of slender resources.

We are indebted to Major J.H.R. Shaw for his kindness in allowing us to work on his land, and to Edward Wood of Starfits

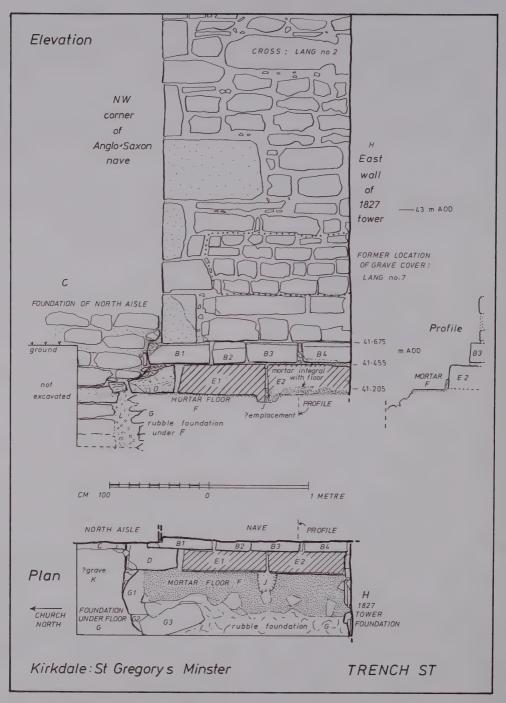


Fig 18 - Trench ST, elevation, plan and profile.

Farm for his unfailing goodwill and practical help, together with Stephen Nixon; to Sue Doktor and Peter Addison, the churchwardens, who have given us every encouragement and		McDonnell ed. 1963	J. McDonnell, A History of Helmsley, Rievaulx and District (York, 1963).
help; to the Reverend John Warden, who has generously allowed us to work on the church, and has shared our enthusiasm at the discoveries, as have the Friends and congregation; to Tony Pacitto and Justin Garner-Lahire for their below-ground survey; to all those who have helped in the survey, recording and excavation: students of the University of York and members of the Helmsley Archaeological Society, especially Madge Allison and Basil Wharton; and finally to the Society for Medieval Archaeology and the North Yorkshire County Council for financial help, the latter arranged by the County Archaeologist, Neil Campling, and administered by Robert Wilton.		Morris 1920	J.E. Morris, <i>The North Riding of Yorkshire</i> (Methuen's Little Guides, 2nd ed., London, 1920 (lst ed. 1906)).
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